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Epidemiology of work related neck and upper limb problems: Psychosocial and personal risk factors (Part I) and effective interventions from a bio behavioural perspective (Part II)

Epidemiological research of work related neck and upper limb problems showed that effective prevention, retention and rehabilitation of upper limb symptoms is probably much more complex than hitherto allowed for.

The background for this review is summarised succinctly by the authors:

> *Work related neck and upper limb symptoms have a multi-factorial origin. Possible risk factors are of a physical, psychosocial or personal origin. These factors can reinforce each other and their influence can also be mediated by cultural or societal factors. Initially, most research on neck and upper limb symptoms focused on work-related physical exposure. Nowadays, psychosocial work characteristics are recognized as important risk factors. Various models have been developed to offer frameworks for possible pathways, but their empirical support is still not conclusive.*

Some specific results of the review are presented here.

- High work demands or little control at work are often related to neck and upper limb symptoms. However, this relationship is neither very strong nor very specific.

- Perceived stress is consistently related to neck and upper limb symptoms. This also applies to general distress or other pain (co-morbidity). That is, stress has a general effect on perception of symptoms.

- Job dissatisfaction does not contribute to neck and upper limb symptoms.

- Too little research on personal characteristics is available to draw any conclusions. It is plausible that behavioural aspects, such as work style, are of importance in the aetiology of work related upper limb symptoms. Work style is conceptualised as a learned and reinforced strategy for coping with increased job demands that may affect musculoskeletal health.

- From the low back pain intervention research can be learned that interventions should best be targeted to both the worker and the organisation and that interventions will only be successful when all stakeholders are involved.

- For monotonous work there is no evidence that job rotation or task enrichment reduce the level of reported symptoms.

- Evidence in favour of rest breaks is inconclusive.

- Evidence in favour of psychosocial interventions is inconclusive.

Comment

European studies generally find that 15% of workers have a pain problem which they believe is made worse by work. UK studies put the proportion nearer to 4%. Such a belief is likely to act as a barrier to retention and rehabilitation and may have been reinforced by regulations such as the Display Screen Equipment Regulations (1992) and subsequent guidance and campaigns.

For upper limb pain, a consensus approach to problem solving has been promoted by HSE for several years now. Guidance for this [HSG60 (2002)] however, still relies on extrapolations made from high exposure situations and may unduly encourage the view that physical exposures are the main problem.

Examples of factors to include in a high risk work style could be: working through pain, excessive avoidance of pain, anticipating the possible negative reactions of colleagues, ignoring support, making high demands on one's own performances at work, offloading work onto others.